



Cost of VHF Receivers To Be Cut by CAA Plan

Stress on Stalls In Pilot Training Urged by Group

Airplane owners will be able to buy low-cost Very High Frequency radio navigation receivers by the end of this year under a competitive-bid development contract announced by the Civil Aeronautics Administration.

The receivers will allow fliers to navigate visually, using indications from the new CAA-developed omniranges soon to become standard airway equipment throughout the United States. The airborne radio sets also will receive VHF communications from the ground, and will receive the localizer indications of the CAA Instrument Landing Systems.

The National Aeronautical Corporation of Ambler, Pa., has signed a contract with the CAA for development of the low-cost receivers. At the same time, the company has announced production plans which will permit retail sale of the equipment for about \$400. Installation, antenna, and taxes will be less than \$100, bringing the total cost to the private flyer below \$500. This is about one-fourth the price of any previously available omnirange receiver.

Low Wholesale Prices—Aircraft manufacturers planning to use the receiver as standard equipment can purchase sets in quantity at much lower than list price. Under terms of the contract, low wholesale prices also will be extended to any organization or individual who purchases ten or more receivers at the same time.

Donald M. Stuart, director of CAA's Office of Technical Development, pointed out that the new receiver will give private fliers the benefits of new and much-improved navigational equipment which, until now, has been out of their financial reach.

"The benefits of an omnirange receiver include all the advantages of a low-frequency receiver combined with an automatic direction finder," Stuart said. "In addition, the omnirange receiver is much simpler and easier to use. By tuning in two omni stations, he can obtain an accurate fix in a few seconds."

Tiresome Signals Out—"The pilot will no longer have to listen to tiresome signals from the old-fashioned four-course ranges. He will be able to fly by glancing at the indications on a vertical needle. He will no longer have any problem of determining what quadrant he is in—he will always be 'on course' as long as he is within range of an omni ground station.

"As he flies along, he will be able to hear weather reports and messages sent out over the voice channel

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Aviation Education Conference Attracts 50 Educators

Fifty educators from school systems in all parts of the country gathered in Washington June 22-25 under sponsorship of the Civil Aeronautics Administration and the American Council on Education for a "Demonstration School Project Conference."

Welcomed by D. W. Rentzel, Administrator of Civil Aeronautics, they heard several major speakers and engaged in a score or more of panel and group discussions on their specialty.

After the conference the educators returned to their homes to make practical studies of aviation education teaching methods during the next school year and then contribute to three instruction manuals, which will be made available to elementary, junior high and senior high aviation teachers.

The educators were selected by their superintendents at the request of the CAA and the American Council and were the guests of the CAA in Washington during the conference. The Navy assisted in flying them to Washington and back to their homes.

Speakers generally emphasized the effect which the airplane is having and will have on the lives of students now in school, one speaker pointing out that these students must be prepared now for living in the year 2000. Another said the world has "for the first time, been reduced to a manageable size"; and another detailed the mass of knowledge gained in the last year and the difficulty educators face in applying it to the needs of the coming generation.

Principal speakers were: Dr. Karl de Schweinitz of the American Council; Dr. G. H. Reavis, curriculum expert of the Cincinnati school system; F. B. Lee, Deputy Administrator of the CAA; J. Parker Van Zandt, editor of World Aviation Annual; and L. Welch Pogue, former chairman of the CAB.

Greater emphasis on teaching recognition of the stall was recommended by the Civil Aeronautics Administration's Non-Scheduled Flying Advisory Committee at its June meeting. The Committee also reaffirmed its proposal that the spin test for private pilots' examinations be eliminated.

In reaffirming its recommendation to the Administrator that the spin test be dropped from the private pilots' examinations, the Committee argued that fatalities and serious accidents from spins and stalls have held steady for many years and that these accidents usually occur at low altitudes. Thus, even if a pilot knows how to recover from a spin and has proved it to an examiner in getting his license, his knowledge did not take care of the situation that resulted in a fatal accident, it was argued. In addition, manufacturers complain that they can sell only training planes that easily go into a spin. Those who build spin-proof and spin-resistant planes cannot sell them to operators to use for training and this is the largest area of their sales.

Emphasis on Stalls Urged.—The Committee expressed the belief that more emphasis ought to be put on teaching recognition of the stall or on the use of stall warning devices and the training of students to watch instruments during all training periods.

The Committee heard Dr. Philip J. Rulon, Professor of Education of the Harvard Graduate School of Education, describe a research study which revealed that student pilots, private pilots and instructors are unable to determine accurately when they are on the "edge of a stall" without mechanical help.

The Committee agreed that success of the CAA cross-wind landing gear ought to be reflected in plans for airports. They agreed that the industry needs more airports and expressed the belief that federal airport money could be used more advantageously in producing single-strip airports which would always remain as such, instead of being the

(See Emphasis on Stalls Page 84)

Personal Plane To Win Mass Approval Held Basic Need of Aviation Industry

Development of a personal plane which will meet mass acceptance is an achievement American industry will accomplish, Ben Stern, Assistant Administrator for Aviation Information, Civil Aeronautics Administration, told an audience at the Parks College of Aeronautical Technology, Saint Louis University, East St. Louis, Ill., recently in outlining the part played by the CAA in helping solve the increasing problems of civil aviation.

He expressed the belief that the problem of bad-weather schedules, now reducing airline revenues, will be solved when the recommendations of the Radio Technical Commission for Aeronautics are implemented.

"We would have cause for pessimism if there were no solutions offered to cope with the perplexing problems," Mr. Stern said in summarizing the situation of civil aviation, "but thanks to our constantly advancing skill and technical knowledge, we can foresee the time when scheduled air transportation will operate with almost maximum regularity in all kinds of weather as a result of new air navigation and traffic control aids; when air freight will become a thoroughly reliable and fundamental means of the transportation of all merchandise, except bulk products such as grain and ore; and when there will be a general mass acceptance of the personal plane as a vehicle of utility because of developments which will permit flexibility of handling through reduction of landing speed, length of runway necessary for landings and take-offs, and elimination to a great degree of its noise production."

He cited the tremendous expansion in airborne freight but stated that in the CAA it is believed that personal aircraft provide the greatest eventual potential for industrial growth of any phase of aviation.

Basic Work of CAA Listed.—He listed the three basic ways in which the CAA carries out the mandate of Congress to encourage and foster the development of civil aeronautics.

"One of these is advancing aviation safety, including administration and enforcement of the regulations issued by the Civil Aeronautics Board," he said. "A second is the development, establishment and operation of federal airways. The third is operating a federal aid program for the construction of civil airports.

In addition, there are other essential activities which help coordinate these three activities and tie them together into a working team. None of the three can stand alone—the three working together within the CAA framework are a powerful united force. They strive as a team toward the over-all objective—the encouragement and fostering of civil aviation."

In outlining the teamwork necessary, he cited the technical development work of the CAA at the Experimental Station at Indianapolis; the activities of the Office of Aviation Training in encouraging schools to introduce aeronautical studies at all grade levels; the work of the Office of Aviation Information, which furnished more than 8,000,000 items of information requested in 1947. Other CAA units necessary to complete the team are administrative, such as Business Management and Field Operations. Also, as a result of the mushroom growth of international air routes since the war, the CAA's international duties and obligations have multiplied. An organization called the Staff Programs Office concentrates on this aspect of CAA work.

Mass Market Is Goal.—"If we are ever to reach the great potential mass market for personal aircraft, one need stands out above all others," Mr. Stern said. "The industry must make an intensive effort to produce planes which will make short, quiet, easy, slow-speed landings. To obtain mass acceptance of the personal plane, industry must produce a vehicle capable of landing at speeds from 25 to 30

miles an hour and to take off or land in 250 to 300 feet over a 26 to 50-foot obstacle. These are not impossible objectives. Once achieved, mass acceptance of the personal plane is inevitable. American techniques and American ingenuity faced by an American demand for a really useful airplane will meet the challenge and produce this plane."

Despite the unfavorable financial situation of the airlines in 1947, a growing public acceptance of air transportation makes the outlook "not too dreary," Mr. Stern said.

"The only serious deterrent is the ability of the airlines to maintain their schedules during bad weather," he pointed out. "We in the CAA believe that this problem of bad-weather schedules will be solved when the recommendations of the Radio Technical Commission for Aeronautics are implemented. These provide for installing all-weather navigation and landing aids, and modernized airway traffic control equipment. The plan is divided into two parts: an interim program to be completed by 1953, and a full program 10 years later—by 1963. Experts expect this program, when finally completed, to bring about approximately 95 percent of safe clock-like schedule precision under the most unfavorable weather conditions.

Airways Congestion Relieved.—"The long-range part of the program is important, but something had to be done immediately to help relieve the present airway congestion. One part of the short-range interim program calls for widespread use of very high frequency navigation and communication equipment. The CAA already has VHF receiving equipment throughout its airway system, and 100 omni-directional ranges are in operation. By late in 1949, 400 omni-directional ranges will blanket the United States with signals."

Factors responsible for the 1947 deficit of the scheduled air transport industry despite the record volume in traffic and cargo were reviewed by Mr. Stern.

"Load factors are now hitting their postwar lows at approximately 57 percent," he pointed out. "At the same time the average daily use of aircraft has fallen from 9 hours and 47 minutes in 1946 to 8 hours and 5 minutes in 1947. This decline in load factors and aircraft use, when added to the constantly rising costs which afflict the airlines, may very well account for the losses incurred by the industry during 1947."

With the RTCA recommendations being implemented, he foresaw an air transport industry operating with a high degree of regularity which will be reflected in the balance statements. He also foresaw the time when air cargo would create additional traffic by opening new and distant markets.

Airborne Freight Increasing.—"One of the most interesting postwar developments has been the tremendous expansion of airborne freight," Mr. Stern said. "Before the war, air transportation was concerned mainly with passenger traffic. But the military air transport groups demonstrated that almost any kind of cargo could be carried by air. At the

(See Personal Plane Page 77)

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Civil Aeronautics Administration
D. W. Rentzel, Administrator
Ben Stern, Asst. Administrator
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CAA and CAB Releases

Copies of CAA releases may be obtained from the CAA Office of Aviation Information. CAB releases are obtainable from the Public Information Section of the Board. Both offices are located in the Department of Commerce Building, Washington 25, D. C.

Administration

CAA will begin now to Rent Planes for Officials (May 30).

Low-Cost, Versatile VHF Receivers soon Available for Private Pilots, CAA Says (May 31).

CAA Drop Tests Show Landing Flares Adequate for Four-Engine Aircraft (June 14).

New Tabulation of State Air Laws Issued by the CAA (June 21).

CAA Prohibits Dust in Weed-Killing at Request of Department of Agriculture (Joint Release with Department of Agriculture) (June 24).

Address by Ben Stern, Assistant Administrator for Aviation Information, entitled "The Federal Government and Civil Aviation" at the Parks College of Aeronautical Technology, Saint Louis University, East Saint Louis, Illinois, June 11, 1948.

Board

Hearing date set on private aircraft accident at Somerset, Pa. (CAB 48-42) May 25, 1948.

CAB Member visits feeder air carriers (CAB 48-43) May 26, 1948.

Chairman names confidential assistant (CAB 48-44) June 1, 1948.

CAB Member Adams names assistant (CAB 48-45) June 1, 1948.

Board assistant general counsel resigns (CAB 48-46) June 4, 1948.

Board names state liaison officer (CAB 48-47) June 8, 1948.

CAB Chairman completes field trip (CAB 48-48) June 18, 1948.

Mileage and traffic statistics for March 1948 (CAB 48-49) June 18, 1948.

Mail Ton-Miles Gain in March

United States mail ton-miles flown by the 16 domestic trunk airlines for March 1948, increased 7.48 percent over the corresponding period in 1947, a report issued by the Civil Aeronautics Board reveals.

United States mail ton-miles flown in the month ending March 31, 1948, were 3,044,922, compared with 2,832,926 for the same period in 1947. For the 12 months ending March 31, 1948, the mail ton-miles flown were 33,159,501, compared with 31,371,315 for the 12-month period ending March 31, 1947.

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Units of Measurement Suggested by ICAO Would End Confusion

A plan to eliminate the hazard and inconvenience in international aviation caused by the use of English and metric units of measurement in aviation communications has been transmitted by the International Civil Aviation Organization to its member states. The plan, involving an ICAO table of units, takes the form of an international standard to be incorporated into the legislation of the Organization's 48 member nations and provides for progressive measures to resolve present difficulties caused by the use of metric and foot-pound-second units in air-ground communication. Ten years is the suggested length of time for completion of the over-all plan, but this is subject to the consensus of member states.

Consideration of the question of unification of dimensional systems was given at the Chicago Aviation Conference in 1944. In May 1947 the Organization's First Assembly recommended the adoption of a compromise table of units incorporating details of both the metric and the foot-pound-second systems.

Not all nations were able to accept the proposed compromise immediately. For this reason the new international standard on dimensional practices provides five separate tables of units, including the ICAO table of units, with each of the 48 member states of ICAO required to designate which table will be used by its ground stations for air-ground communication in international operations. Each aircraft will carry conversion tables but in cases of emergency the ground station will transmit information in the units requested by the aircraft's crew.

Change Due January 1.—The new standard will go into effect on January 1, 1949. According to the suggested time schedule, 2 years later the number of dimensional tables would be reduced to three; after 5 years the number would be cut down to two, and at the end of the tenth year it is hoped that all states will have adopted a single table—the ICAO table of units.

This gradual conversion aims at ensuring that each nation would be able to plan its dimensional changes well in advance, thereby eliminating possible confusion. After 10 years—on January 1, 1959—complete, world-wide standardization in aviation com-

munications will be achieved, provided the suggested time schedule is adopted.

Under the proposal, after January 1, 1959, distances would be given in nautical miles, altitudes in meters, horizontal speed in knots and vertical speeds in meters per second. Wind direction and speed would be given in degrees and knots, cloud heights in meters, and visibility in meters or kilometers. Altimeter settings would be in millibars, temperatures in centigrade and weight in kilograms. Time would be the 24-hour day, beginning at midnight, Greenwich mean time.

State Liaison Officer Is Appointed by CAB

Merrill Armour, Assistant Chief Examiner of Safety Enforcement Proceedings Division, has been appointed as the Civil Aeronautics Board's Staff Liaison Officer for Federal-State relations, it has been announced.

In his capacity as Staff Liaison Officer, Mr. Armour will work closely with State aviation officials on such matters as enforcement of safety regulations, coordination of accident investigation, and State and Federal regulatory functions concerning aviation.

To obtain their enforcement on safety regulations without placing undue burden or duplicate licensing and regulations upon aviation, it is essential that the State aviation authorities and the Board coordinate their activities, the Board announcement said. The States have also shown a willingness to cooperate with the Federal Government in such matters.

Mr. Armour has been with the Board since 1942 and has worked with the National Association of State Aviation Officials on mutual enforcement problems for the past two years. He will report to the Board through Vice Chairman Oswald Ryan, Board Member in charge of Federal-State coordination.

Testing Report Available

"Testing Program for Long Range Navigation Facilities" is the title of a report of Special Committee 13 of the Radio Technical Commission for Aeronautics. The paper, numbered 44-48/DO-14, dated May 5, 1948, is now available upon request to L. M. Sherer, Executive Secretary, RTCA, room 597, Department of State Building, Seventeenth and Pennsylvania Avenue NW, Washington 25, D. C.

Inside Route to Alaska Avoids Dangerous Terrain

Private pilots making trips to Alaska should use the inside route along the Alcan Highway, avoiding the dangerous coastal route, according to Burleigh Putnam, Jr., Superintendent of the Civil Aeronautics Administration's Airman, Aircraft and Aircraft Operations Branch in Alaska, who described the 352 miles from Port Hardy to Annette as "about the worst possible that I can think of outside the Aleutians."

"It is far better to detour inland via Prince George and Smithers," he said, in discussing the hazards of the coastal route for non-air carriers. "The anti-climax of the whole story is that it is not much farther to travel inland with a highway offering security every foot of the route, infinitely better weather and landing fields never more than 100 miles apart." He called the coastal terrain "hopeless" with "long stretches of open sea and hopeless shorelines."

He cited three instances in which pilots lacking in instrument training narrowly escaped disaster in flights from Seattle to Annette Island in urging a continuous educational program on the subject of coastal flights to Alaska.

"It is the old story of pilots utterly lacking in in-

strument training and ability flying single-engine land aircraft from Seattle to Annette Island, stretching fuel range to the maximum without regard to the lack of alternates, ultimately flying on top of cloud layers and getting lost," Putnam said.

As an example, he cited the case of a landplane, with five passengers, which contacted Annette Island radio and advised that they were lost and very low on fuel. Jack Jefford, CAA Chief Patrol Pilot in Alaska, took off in a CAA aircraft, ran down the lost plane by the use of the ADF and led him into Annette with five minutes of fuel remaining in his tanks.

In another case, an aircraft en route from Seattle to Annette, 708 miles, non-stop, got lost on top of cloud layers and was unable to locate Annette. Communicators oriented him and the aircraft landed with ten gallons of fuel remaining.

"In each of these cases the pilot was not an accomplished instrument pilot, radio equipment was of dubious quality and reliability, nor did the pilots demonstrate a knowledge of the bare rudiments of navigation by radio aids," Putnam said.

CAA To Have Quarters At Idlewild Airport

Regional offices of the Civil Aeronautics Administration and the United States Weather Bureau jointly will occupy the first permanent building to be constructed by the Port of New York Authority at New York International Airport at Idlewood, according to a contract between the Public Buildings Administration and the Authority.

Housing of the regional offices of the Government agencies at the great new airport will enable them to facilitate their work in connection with international air transportation. At the same time, they will find it possible to coordinate their activities in a single headquarters rather than to operate at scattered offices, as at present.

To be ready for occupancy on April 1, 1949, the three-story office building, 400 feet square, of steel and grey brick construction, will cost about \$4,500,000. The building will occupy a 10-acre site adjacent to the Van Wyck Expressway at a point immediately inside the airport boundary.

Offices Now Scattered—CAA offices now scattered through midtown Manhattan, Jackson Heights and LaGuardia Airport will be transferred to New York International Airport upon completion of the new building. The strategically located district CAA offices serving private flying and other aeronautical interests will remain in their present locations under the supervision of the regional headquarters.

The Weather Bureau will continue its Manhattan office for local New York service. To service aviation, the Weather Bureau, in addition to its regional office in the new building, has a briefing and observation station in the administration building. At a later date, the weather forecast offices at LaGuardia will be transferred to the international air terminal.

The CAA expects to have between 400 and 500 employees at the airport, while the Weather Bureau will have about 55.

Pilot Certificate Records

Show Civil Flying Interest

Civil Aeronautics Administration records of pilot certificates issued during the first four months of this year indicate a continued healthy interest in civil flying. In the period January through April, 1948, 76,608 pilot certificates (including students) were issued. This total was somewhat less than for the same period of last year but considerably higher than in 1946.

Commercial licenses registered a 10 percent increase over 1947 but the student and private pilot categories were running below the 1947 level.

Comparative figures for the four-month period January through April of each postwar year are shown in the table below:

January through April	Certificates Issued			
	Total	Student	Private	Commercial
1946.....	64,813	30,423	9,707	24,683
1947.....	88,427	56,176	30,246	2,005
1948.....	76,608	46,895	27,510	2,203

1 An unusually large number of commercial certificates were issued in 1946 because men leaving service were granted certificates on the basis of military competency.

States Moving Toward Uniform Aviation Laws, CAA Tabulation Shows

Further progress toward uniformity in laws relating to aviation in all States is indicated in a revised tabulation of such legislation, issued by the Civil Aeronautics Administration, D. W. Rentzel, Administrator of Civil Aeronautics, has announced.

Only two states have no department or commission to which its aviation matters are assigned; 10 have special Aviation Departments, 31 have Commissions and 12 assign their aviation matters to existing state departments.

More states are requiring state registration of aircraft, airmen, schools and airports. In general this registration consists merely of recording the federal registration, and is subject to a very nominal charge. Forty-five states require that aircraft operating within the state have federal registration, and 46 require their airmen to be federally certified.

Eighteen States Adopt Act—A smaller proportion of states write their own legislation governing flight, 18 having adopted the uniform State Aeronautics Act on this subject. Many states are training police officers in apprehension of violators of flying laws, and 12 have special aviation police. All but six states have provisions for "fostering civil aviation." In investigating accidents, 24 states have their special agents, and 26 cooperate actively with federal investigators.

The Aeronautics Body in 33 states has authority to construct, operate and maintain airports. In 43 states this authority is given to counties and in 46 states it is given to cities. The difficult problem of zoning for airport areas is handled in 29 states by adoption of the CAA's model zoning act.

In aviation fuel taxes, there is less uniformity. All but four states levy taxes on motor fuel but some refund this tax in whole and some in part when the fuel is used in airplanes. Only four states levy tax specifically on aviation fuel. In 16 states this tax money is kept and devoted to aeronautical purposes, such as construction of airports, air navigation aids, air marking, etc. Full refunds are made by 22 states, partial refund by 12 and 10 states grant full exemption from tax on such fuel.

The tabulation was made by the Legal Department of the CAA in collaboration with the Air Transport Association, and copies are available from the Office of Aviation Information, CAA, in Washington.

CAA Communicators Praised

Two Civil Aeronautics Administration communicators at Iliamna, Alaska, were praised recently by Pilot Gren Collins of the Airplane Charter Service for valuable assistance in getting United States Commissioner Sam Foss to a hospital.

In a statement to the Anchorage Daily News, Collins told how he was flying a seaplane from Anchorage to Naknek when he called the CAA radio station at Iliamna to give a routine position report. Communicators Lawrence O. Bahls and Clarence C. Holmberg asked if he could land at Pedro Bay to pick up Commissioner Foss, who was critically ill. The CAA communicators furnished full information regarding ice conditions and Commissioner Foss was picked up without difficulty. He was taken to Naknek, where the CAA communicators had arranged for a Northern Consolidated Airlines plane to stand by to take him to a hospital in Anchorage.

To Cut Cost of VHF Receivers (Continued From Page 73)

of the omnirange. In addition, he will be able to use the communication part of his receiver to pick up tower and communication stations operating in the static-free Very High Frequency channels.

"On top of all this, the phase-comparison localizer circuits will help bring him in safely at any airport equipped with an Instrument Landing System of the new phase-comparison type. This equipment will show any variation of more than a few feet to the right or left of the proper approach to the runway."

Localizer Is Improved Type—The phase-comparison localizer is part of a new and improved type of Instrument Landing System. A few such ILS installations are now operating or under construction. Under international agreement, new ILS installations after 1950 will be of the phase-comparison type, which eventually will replace the intensity-comparison type now in more general use. Purchasers of the low-cost receivers, therefore, will have equipment of the very newest type.

About 400 omniranges will blanket the United States with signals by late 1949. Nearly 100 such ranges are operating now, and the number will be increased to 250 or 300 by January 1. Each has an accurate range in every direction of 50 or 60 miles.

The scheduled airlines have some omnirange receivers for training and test purposes, and orders have been placed for quantities of the equipment. The scheduled airlines anticipate using the omnirange equipment in regular service in approximately 2 years, shifting to the new system because of the many advantages it offers over low-frequency equipment.

Plans Are Outlined—The CAA has announced that it will operate the VHF omniranges and the low-frequency ranges simultaneously until the VHF installation program is completed and aircraft generally are equipped for VHF reception. Then the low-frequency ranges will be discontinued, and all civil aircraft navigation will be done with VHF ranges.

The low-cost receivers made possible by the contract between the CAA and the National Aeronautical Corporation will give private and non-scheduled fliers most of the navigational advantages now enjoyed only by the pilots of large, scheduled planes. In addition to the omnirange receiver, most pilots will want a VHF transmitter. A variety of such transmitters are now available at a cost of about \$100.

The contract provides for delivery of ten completed receivers to the CAA in October. These receivers will cost \$1,970 each, reflecting the expense of design and development.

"We have agreed to go into quantity production of omni receivers as soon as the ten receivers are delivered to CAA," James Riddle, president of National Aeronautical Corporation, said. "We also have agreed to produce the sets in a quantity which will permit retail sale at about \$400 plus tax. Weight, including power supply, will be about 15 pounds.

"The receivers should be available to private fliers through dealers and distributors by next January."

CAB Chairman Names Assistant

The Civil Aeronautics Board has announced the appointment of Miss Kay Alger as confidential assistant to Joseph J. O'Connell, Jr., Chairman of the Board.

Miss Alger has been employed by the U. S. Treasury Department in Washington, D. C., since 1934, and from 1942 has occupied the position of Research Assistant to the General Counsel of the Treasury. She is a native of Newport, Rhode Island.

Miss Alger succeeds Mrs. Dorothy Brown, who served as confidential assistant to former Board Chairman James M. Landis. Mrs. Brown's resignation became effective June 1, 1948.

CAB Chairman Makes Feeder Line Inspection

Chairman Joseph J. O'Connell, Jr., of the Civil Aeronautics Board recently returned from an 8-day field trip during which he visited four feeder air carriers at their home bases in Wisconsin, Idaho, Washington and California and inspected several of the newest developments in air carrier aircraft, landing aids equipment and air carrier pilot training.

The first stop was at Madison, Wis., where Chairman O'Connell visited Wisconsin-Central Airlines, which operates in Illinois, Michigan, Minnesota and Wisconsin and is one of the few feeder airlines using small nine-passenger flight equipment. The following day, at Boise, Idaho, the CAB Chairman and his staff called on Empire Airlines, which serves a mountainous area in Idaho, Montana and Washington. In Seattle, Wash., a similar visit was paid to West Coast Airlines which conducts a north-south service through the coastal area of Washington and Oregon. The last of the four feeder airlines visited was Southwest Airways in San Francisco, whose route extends from just north of the Oregon line to points in California as far south as Los Angeles.

At Seattle, the CAB group visited the Boeing Aircraft Company. En route from Seattle to San Francisco, they stopped off at the Landing Aids Experiment Station, Arcata, Calif., where all-weather landing aids are being developed. On the last day of his schedule, the CAB Chairman landed at Ardmore, Okla., to view the operations of the American Airlines Pilot Training Center.

The Chairman was accompanied by Col. Robert V. Garrett, Chief Pilot of the Board; John M. Chamberlain, Assistant Director, Regulations, CAB Safety Bureau; Dessel G. Erickson, Accident Analysis Division, CAB Safety Bureau; Harold Huylar, CAB Aircraft Inspector; and Edward E. Slattery, Jr., CAB Chief of Public Information.

Output of Complete Aircraft Holds Level During April

Output of complete aircraft, as measured by airframe weight, remained at the March level during April. Military airframe weight declined 13 percent but this was almost completely erased by a sizeable, seasonal gain in civil airframe weight.

Of the month's total output of 937 aircraft, 772 were civil. These civil aircraft were valued at \$8,454,000, an increase of nine percent over the \$7,721,000 shipped during March.

April civil aircraft shipments were as follows:

	Number of Units		Airframe Wt. (000 lbs.)	
	April	March	April	March
Total.....	772	585	847.3	710.0
By type:				
Personal.....	756	571	539.1	424.0
Transport.....	16	14	308.2	236.0
By number of places:				
2-place.....	461	337	245.9	188.6
3- and 4-place.....	277	222	266.7	219.9
Over 4-place.....	34	26	334.7	301.5
By total rated hp. (all engines)				
1-74 hp.....	206	135	91.3	61.2
75-99 hp.....	222	157	127.8	90.6
100-399 hp.....	322	277	305.9	266.5
400 hp and over.....	22	16	322.3	291.7

Aircraft Engine Output Gains

Aircraft engine manufacturers reported a total output value of \$31,123,000 for April, an increase of three percent over the previous month. Military production accounted for 82 percent of the April volume.

Civil shipments included 975 engines valued at \$3,222,000 plus spares worth \$2,013,000. Manufacturers of military engines shipped 416 units valued at \$20,760,000 plus spares valued at \$4,841,000.

CAA Tabulation Shows Pilot Total of 433,241 In U.S. on April 1

In its most recent state-by-state tabulation of certificated airplane pilots, records of the Civil Aeronautics Administration reveal there were 433,241 pilots in the United States on April 1, 1948. Of these, 244,270 were private pilots, 181,912 were commercial pilots, and 7,059 held airline transport certificates.

California, with a total of 43,572, had the greatest number, with Illinois, having a total of 29,653, in second place. Texas was third with a total of 25,784.

The tabulation by States follows:

Certificated Airplane Pilots, by States

As of April 1, 1948

State	Total	Air-line trans- port	Com- mer- cial	Pri- vate
TOTAL.....	433,241	7,059	181,912	244,270
Alabama.....	4,315	25	2,024	2,266
Arizona.....	3,966	11	1,375	2,580
Arkansas.....	4,512	7	1,713	2,792
California.....	43,572	1,189	19,640	22,743
Colorado.....	5,467	129	2,183	3,155
Connecticut.....	3,886	43	1,895	1,948
Delaware.....	777	25	320	432
District of Colum- bia.....	2,152	120	1,068	964
Florida.....	12,576	875	4,808	6,893
Georgia.....	6,165	203	2,793	3,169
Idaho.....	3,122	14	1,041	2,067
Illinois.....	29,653	508	19,160	9,985
Indiana.....	10,930	32	4,178	6,720
Iowa.....	8,123	14	3,604	4,505
Kansas.....	8,672	108	3,561	5,003
Kentucky.....	3,919	7	1,661	2,251
Louisiana.....	4,531	79	2,141	2,311
Maine.....	2,055	11	765	1,279
Maryland.....	3,613	24	1,622	1,967
Massachusetts.....	9,184	109	4,702	4,373
Michigan.....	17,391	108	6,808	10,475
Minnesota.....	8,618	198	4,425	3,995
Mississippi.....	2,865	22	1,445	1,398
Missouri.....	10,015	281	4,774	4,960
Montana.....	2,900	11	1,216	1,673
Nebraska.....	5,137	8	1,986	3,143
Nevada.....	1,259	9	435	815
New Hampshire.....	1,354	10	527	817
New Jersey.....	8,243	100	4,248	3,895
New Mexico.....	2,188	9	705	1,474
New York.....	21,276	860	11,641	8,775
North Carolina.....	5,835	18	2,630	3,187
North Dakota.....	1,917	1	705	1,211
Ohio.....	19,938	80	8,437	11,421
Oklahoma.....	8,906	69	3,698	5,139
Oregon.....	6,724	40	2,251	4,433
Pennsylvania.....	19,097	135	8,763	10,199
Rhode Island.....	1,328	8	667	653
South Carolina.....	3,210	8	1,333	1,819
South Dakota.....	1,946	2	773	1,171
Tennessee.....	5,681	188	2,829	2,664
Texas.....	25,784	574	11,964	13,246
Utah.....	3,319	47	1,375	1,897
Vermont.....	770	5	340	425
Virginia.....	6,078	80	2,496	3,502
Washington.....	10,501	181	4,082	6,238
West Virginia.....	2,838	6	1,228	1,604
Wisconsin.....	7,597	30	3,443	4,124
Wyoming.....	1,468	24	508	936
Alaska.....	830	33	256	541
Hawaii.....	540	34	171	335
Foreign.....	412	15	162	235
Not classified as to state.....	46,086	332	5,287	40,467

Trophy Awarded For Air Marking



Col. Jesse L. Dobbins, right, is shown receiving the Blanche Noyes trophy from the founder of the award while Maj. Gen. Lucas V. Beau looks on.

Colonel Jesse L. Dobbins, Atlanta Wing Commander of the Civil Air Patrol of Georgia, recently was awarded the Blanche Noyes trophy for putting in a total of 61 air markers during 1947, D. W. Rentzel, Administrator of Civil Aeronautics announced. The trophy is awarded annually to the individual who is most effective in increasing the number of standard air markers and who receives no pay for the work.

Colonel Dobbins is the second member of the Civil Air Patrol to win the award. For 1945, the trophy was awarded to the late Colonel Frank Dawson, CAP, who succeeded in getting 111 markers installed in North Carolina. For 1946 it was given to Mrs. Gladys N. Snyder, Rockford, Ill., who was responsible for 31 markers.

Personal Plane Advance Vital

(Continued from Page 74)

end of the war, civilian air cargo began to move in unprecedented volume, and the growth has continued ever since.

"Air transport analysts anticipate a further vast expansion of air cargo services as more economical all-cargo planes are designed and placed in service, and rates are reduced to levels where air transportation can compete directly with most forms of surface transportation."

Further progress in the anti-noise program was predicted. "More work is being done on this problem," Mr. Stern said, "and we in CAA are optimistic that eventually new devices and techniques will result in an appreciable reduction of noise."

The need for governmental assistance to expedite the development of new cargo and passenger planes was cited.

"Developing and improving large commercial aircraft has proved in recent years to be a tremendously expensive and risky financial venture," the speaker said. "Assumption of this burden by the Federal Government would be an incentive for manufacturers to proceed with new designs and new techniques, ultimately benefiting the whole of civil and military aviation."

Would Increase Air Cargo.—"Such a program on the part of the Government is the only possible method whereby the nation can be assured that we will have cargo planes which can be produced at comparatively less cost to the purchaser and will be less expensive to operate. Until we have such cargo planes, we will have no actual mass volume of air cargo business. Only through governmental aid can the process of design and production be accelerated and this, it confidently is believed, will result in at least a tripling of the amount of cargo carried in air commerce."

Problems encountered in laying down and enforcing safety rules were also discussed. "Obviously, it's impossible to please everybody with safety regulations," Mr. Stern said.

"The CAA always has felt that regulations should be as few and as simple as are consistent with reasonable safety in the air," he continued. "Almost everybody will agree with that philosophy, but the trouble comes in trying to put it into effect. Everybody has a different idea of what is simple and reasonable. So I'm afraid that any agency which makes the safety regulations always will be in for heavy fire from both sides. Yet you will agree that a careful study of the results achieved under present regulations reveal a most impressive record."

Cited to indicate that regulations have not been unduly restrictive was the fact that there are now more than 90,000 civil aircraft against 11,159 in 1938, when the act creating the CAA became law, and the 400,000 certificated airplane pilots on the rolls now as against 22,983 in 1938.

"On the basis of 1947 records it was possible to travel in scheduled aircraft 31,000,000 miles, or 1,269 times around the world, before the chance of a single fatality," he added, pointing out that "23 out of the 26 domestic and international scheduled air carriers were cited by the National Safety Council for maintaining their number of passenger scheduled operations without a single fatality during the year; and 15 of these not only went through 1947 without a passenger or crew fatality, but completed from 2 to 18 years of such fatality-free operations. Is that a bad record? I think you will agree with me that this is a history of accomplishment deserving of commendation."

"And it does not end there. The records of CAA show that 6,000 airports were registered on May 1, as against 4,769 on the same date a year ago; that 1,448,000 aircraft operations were reported by CAA airport towers for the first two months of this year, as against 1,306,183 for the same period in 1947."

Official Actions

Civil Aeronautics Board

Regulations

Amdt. 43-3 Effective July 3, 1948

Part 43 of the Civil Air Regulations provides that aircraft identification marks shall be displayed on civil aircraft in a manner prescribed by the Administrator and shall consist of the registration symbol "N" and the airworthiness classification symbols "C," "R," "X," or "L" followed by the registration numerals.

The purpose of this amendment is to eliminate the airworthiness classification symbols "C," "R," "X," and "L" from the identification mark and to redesignate airworthiness certificates as "standard," "restricted," "experimental," and "limited," respectively.

The increasing number of aircraft being registered has resulted in the assignment of identification marks employing six numerals. It is desirable that identification marks with fewer digits be employed. The deletion of the letter denoting the airworthiness classification and the employment of letters of the alphabet in combination with numerals to form the identification number will accomplish this purpose.

This amendment also provides that the words "standard," "restricted," "experimental," and "limited" be used in lieu of the symbols "C," "R," "X," and "L," respectively, in the issuance of airworthiness certificates and for airworthiness classification. Aircraft having other than the standard airworthiness certificate, namely, "restricted," "experimental," or "limited," will be required to display the appropriate airworthiness classification over the entrance to the aircraft or at another conspicuous location on the aircraft in a manner and form prescribed by the Administrator.

In consideration of the foregoing the Civil Aeronautics Board hereby amends Part 43 of the Civil Air Regulations:

1. By amending § 43.102 by adding a new paragraph (f) as follows:

(f) **Alternate identification marks.** After December 31, 1948, aircraft registered for the first time and, after December 31, 1950, all aircraft shall display identification marks consisting of the Roman capital letter "N" denoting U. S. registration followed by the registration number. However, this identification mark may be displayed prior to these dates at the option of the owner of the aircraft.

When this identification mark is utilized, those aircraft having other than a standard airworthiness certificate shall display the appropriate airworthiness classification as prescribed in Parts 03, 04a, 04b, 06, and 09 on the aircraft in a manner and form prescribed by the Administrator. Those aircraft having a standard airworthiness certificate need not display the airworthiness classification designation.

2. By amending the title of § 43.30 to read as follows:

43.30 Instruments and equipment for NC powered aircraft or powered aircraft with standard airworthiness certificates.

Amdt. 04b-10 Effective July 3, 1948

The provisions of Part 04b relating to airworthiness classification utilize the symbols "C," "R," and "X" to denote the appropriate aircraft airworthiness classification. The purpose of this amendment is to prescribe the use of the terms "standard," "restricted," and "experimental" in lieu of the symbols "C," "R," and "X," respectively. This part will then be consistent with the amendment of Part 43 which prescribes the use of these terms.

In consideration of the foregoing the Civil Aeronautics Board hereby amends Part 04b of the Civil Air Regulations:

By amending §§ 06.01, 06.02, 04b.03, and 04b.032 by inserting in parentheses as alternate terms the words "standard," "restricted," and "experimental" wherever the symbols "NC," "NR," and "NX," respectively, appear therein.

Amdt. 06-2 Effective July 3, 1948

(Note: The explanatory material under Amdt. 04b-10 also applies to this Amdt.)

The Civil Aeronautics Board hereby amends Part 06 of the Civil Air Regulations:

By amending §§ 06.01, 06.02, and 06.02 by inserting in parentheses as alternate terms the words "standard," "restricted," and "experimental" wherever the symbols "NC," "NR," and "NX," respectively, appear therein.

Amdt. 03-4 Effective July 3, 1948

(Note: The explanatory material under Amdt. 04b-10 also applies to this Amdt.)

The Civil Aeronautics Board hereby amends Part 03 of the Civil Air Regulations:

By amending §§ 03.03, 03.04, and 03.042 by inserting in parentheses as alternate terms the words "standard," "restricted," and "experimental" wherever the symbols "NC," "NR," and "NX," respectively, appear therein.

SR-322 Effective May 25, 1948

Permits Resort Airlines to conduct all-expense air tours on a scheduled basis when operating in accordance with Board order serial No. E-1624.

SR-323 Effective June 15, 1948

Special Civil Air Regulation Serial Number 361-A, as amended, expired June 15, 1948. This regulation provided special operating rules for flights of scheduled air carrier aircraft at altitudes in excess of 12,500 feet east of longitude 100° W. and at altitudes in excess of 14,500 feet west of longitude 100° W. in long-distance operations.

Parts 40, 60, and 61 of the Civil Air Regulations impose undue operating restrictions on long-range, domestic, scheduled air carrier operations under the above conditions. Revisions of these parts which will provide for such operations are now being prepared. It is in the public interest to continue the long-distance

operations authorized by Special Civil Air Regulation Serial Number 361-A, as amended, until these revisions are issued.

The Civil Aeronautics Board hereby makes and promulgates the following Special Civil Air Regulation:

Flights of scheduled air carriers while at altitudes in excess of 12,500 feet above sea level east of Longitude 100° W. and 14,500 feet above sea level west of Longitude 100° W. shall comply with the applicable provisions of the Civil Air Regulations except as follows:

(a) Such flights need not comply with the requirements of § 60.305 Right-side traffic, § 61.731 Deviations from route, or any other sections of Parts 40 and 61 concerning civil airways.

(b) Such flights need not comply with the requirements of § 60.303 Air traffic clearance, § 60.111 Adherence to air traffic clearances, § 60.307 Radio communications, and § 61.602 Weather reports, except to the extent which the Administrator may prescribe.

(c) Each first pilot engaged in these operations shall be qualified for the route, if he is qualified for operations over any regular authorized route for the air carrier involved between the regular terminals for such operation.

(d) Each dispatcher who dispatches aircraft on flights authorized by this regulation shall be qualified under § 61.553 of the Civil Air Regulations for operation over an authorized route for the air carrier involved between the regular terminals of such operations: *Provided*, That when he is qualified only on a portion of such route he may dispatch aircraft only after coordinating the dispatch with dispatchers who are qualified for the other portions of the route between the points to be served.

This regulation supersedes Special Civil Air Regulation Serial Number 361-A, as amended, and shall terminate December 15, 1948.

ER-121 Effective May 28, 1948

Amends Section 292.2 of the Economic Regulations so as to establish a classification of air carriers and relieve such carriers from certain provisions of Title IV of the Act with respect to air transportation solely within Alaska.

ER-122 Effective April 27, 1948

Amends § 292.2 of the Economic Regulations with regard to exemptions of noncertified air carriers in Alaska.

ER-123 Effective June 1, 1948

Amends § 228.4 of the Economic Regulations so as to increase the time after which the application by a carrier to furnish free or reduced-rate overseas or foreign air transportation will be deemed to be granted.

ER-124 Effective June 15, 1948

Amends Section 202.1 of the Economic Regulations so as to specify reporting and record-keeping requirements for Irregular Air Carriers and Noncertified Cargo Carriers. Small Irregular Carriers are required to file "Statistical Reports," while "Large Irregular Carriers" and Noncertified Cargo Carriers are required to file both "Statistical Reports" and "Flight Reports." These requirements are designed to secure information which will enable the Board to evaluate the service rendered by these carriers, and thus aid in the administration of the Act, and to secure information necessary in the enforcement of the operational limitations established in the regulations authorizing this air transportation.

The Board finds in accordance with the interest of the public that with respect to certain data as to specific flights required by the amendment good cause exists for withholding such information from public disclosure since public revelation of this matter might unfairly result in competitive disadvantage and thus adversely affect the interests of the reporting carrier.

ER-125 Effective June 15, 1948

Amends Section 292.1 of the Economic Regulations to delete that part dealing with reporting requirements and to classify irregular air carriers as "large" and "small".

The Civil Aeronautics Board amends § 292.1 of the Economic Regulations as follows:

1. By deleting subparagraph (6) of § 292.1 (c).
2. By adding new subparagraphs (1) and (2) to paragraph (b) and amending subparagraph (2) of paragraph (c), of § 292.1, as follows:

* * * 292.1 **Irregular Air Carriers.** * * * (b) **Classification.**

(1) **Large and Small Irregular Carriers.** Pursuant to paragraph (d), (2) (vii) of this section, the application for a Letter of Registration specifies the aircraft units utilized in the transportation services of the carrier. If, in the case of such units, the allowable gross take-off weight exceeds 10,000 pounds for any one unit or 25,000 pounds for the total of such units (disregarding units of 6,000 pounds or less), such carrier shall be classified as a "Large Irregular Carrier"; otherwise, such carrier shall be classified as a "Small Irregular Carrier."

(2) **Reclassification.** Each Large Irregular Carrier and each Small Irregular Carrier shall conduct its operations in such manner as to comply with the requirements and limitations applicable to its respective class until such carrier has been notified of its reclassification pursuant to application thereto filed with the Board by such carrier. Such application shall specify the number of aircraft units, and the type of each, which such carrier proposes to utilize in air transportation pursuant to such reclassification.

(c) **Exemptions.** * * * (2) **Additional exemptions for Small Irregular Carrier.** Subdivisions (ii), (iv), (vi), (vii), (x), (xi), (xiii), and (xv) of subparagraph (1) of this paragraph shall not apply to a Small Irregular Carrier.

ER-126 Effective May 17, 1948

Amends Section 228.1 of the Economic Regulations which pertains to free travel for postal employees. The purpose of this amendment is to add the Administrative Officer, Air Postal Transport, to the list of postal officers who are to be carried free when

traveling on official business relating to the transportation of mail by aircraft.

ER-127 Effective July 10, 1948

Amends Section 228.3 of the Economic Regulations to clarify the present provisions with respect to free carriage of Board and CAA personnel inspecting for safety purposes and extends the authorization to carriage for the purpose of inspecting route facilities, operational procedures or airmen competency.

ER-128 Effective July 15, 1948

This is an amendment of § 292.1 which in effect permits Small Irregular Air Carriers to engage in the foreign air transportation of persons. This change is accomplished (1) by eliminating the restriction against the foreign air transportation of persons by all Irregular Air Carriers [paragraph (b) item (2)], and (2) by prohibiting Large Irregular Air Carriers from engaging in the foreign air transportation of persons [paragraph (f)].

The amendment also clarifies the existing regulations by removing the definition of the term "point" in paragraph (b) and placing it in a separate paragraph (f). The definition has not been changed.

Airman Orders

Susensions

SD-793 suspends for 6 months private certificate with airplane single engine land rating of Howard K. Johnson, for low flying over the congested area of Hermannville, Minn. (Mar. 18).

SD-794 suspends for 6 months student certificate of Kenneth R. McCarron, for low flying in the vicinity of County Road F and White Bear Ave., St. Paul, Minn. (Mar. 18).

SD-796 suspends for 3 months student certificate of Marshall Penrod, for low flying over a home in the vicinity of Romance, Ark. (Mar. 1).

SD-800 suspends for 9 months private certificate of Herbert U. Lundberg, for piloting an aircraft in aerobatic flight while carrying a passenger when neither he nor his passenger were equipped with a parachute (Mar. 26).

SD-801 suspends for 6 months student certificate of Charles I. Bishop, for piloting an aircraft from Wawasee, Ind. to Ace Airpark, Anderson, Ind. when he was not certificated for a cross-country flight (Mar. 23).

SD-803 suspends for 90 days private certificate with airplane single engine land rating of Baird M. Smith, for piloting an aircraft at Wold-Chamberlain Flld., Minneapolis, Minn., during the hours of darkness when the craft did not display position lights (Mar. 24).

SD-805 suspends for 4 months private certificate with airplane single engine land rating of James W. Isbell, for endangering the lives of passengers and the aircraft, which was the property of another, by piloting the craft under instrument conditions when he did not hold a valid instrument rating (Mar. 23).

SD-806 suspends for 30 days commercial certificate with airplane single-engine land and flight instructor ratings of Henry A. Harmsen, for flying inside an airport approach zone at an altitude of less than 700 feet and within less than 500 feet vertically and 2000 feet horizontally of clouds (Mar. 1).

SD-808 suspends for 90 days any pilot certificate held by Harold W. Wyson, for failing to conform to the traffic pattern at Big Lake Airport, Big Lake, Tex. (Feb. 18).

SD-809 suspends for 60 days private certificate of Jesse H. Owens, for low flying over a lake in the vicinity of Sweetwater, Tex. (Mar. 18).

SD-810 suspends for 60 days commercial certificate of Charles I. Acker, for piloting an aircraft at an altitude of from 100 to 6 feet above the ramp of the Municipal Airport, Waco, Tex. (Feb. 9).

SD-811 suspends for 60 days private certificate with airplane single engine land rating of Rufus W. Condon, for low flying in or above the vicinity of Broward Flld. Airport, Fort Lauderdale, Fla. (Mar. 31).

(See Official Actions Next Page)

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CAB Official Actions

(Continued from Preceding Page)

SD-812 suspends for 60 days private certificate of Everett C. Lunn, for piloting an aircraft in a careless and reckless manner about 3½ miles south of Burlington, Ill. (Feb. 26).

SD-813 suspends for 6 months temporary student certificate of Frank D. Kacir, for piloting an aircraft in a careless and reckless manner in the vicinity of Gagetown, Mich. (Apr. 7).

SD-814 suspends for 30 days mechanic certificate with aircraft and aircraft engine ratings of Frank E. Osborn, for signing the Periodic Aircraft Inspection Report on an aircraft as being airworthy when it was not (Mar. 30).

SD-815 suspends for 60 days private certificate with airplane single engine land rating of Wayne P. Cooper, for piloting an aircraft on a flight from Kalamazoo to Sault Ste. Marie, Mich. when the craft did not have an airworthiness certificate approving its operation (Apr. 7).

SD-816 suspends for 6 months private certificate with airplane single engine land rating of Wilbur L. Smith, for low flying in the vicinity of Waynesville, Ill. (Apr. 2).

Revocations

SD-795 revokes student certificate of Walter Renko, for carrying a passenger (Mar. 18).

SD-797 revokes private certificate with airplane single engine land rating of Aurie M. Lowinske, for giving flight instruction for hire without holding an appropriate commercial license and instructor rating (Mar. 23).

SD-798 revokes student certificate of Louis D. Berenson, for carrying a passenger (Mar. 25).

SD-799 revokes student certificate of Louis J. Wilkins for carrying a passenger (Mar. 24).

SD-802 revokes student certificate of Donald H. Stegemoller, for low aerobatic flying in the vicinity of Duck Creek Road and Ridge Road intersection with Duck Creek, Cincinnati, Ohio (Mar. 25).

SD-804 revokes student certificate of Wayne E. Ellis, for carrying a passenger (Mar. 23).

SD-807 revokes student certificate of Robert C. Meisenheimer for low aerobatic flying over a congested area of the City of Bethalto, Ill. (Feb. 3).

Miscellaneous

S-148 terminates proceedings concerning Roy Tant Hutchinson (Mar. 23).

Airline Orders

E-1350 amends temporary-mail-rate order E-900 issued to Trans-Texas Airways concerning mail pay compensation over its entire system (Apr. 5).

E-1351 through E-1355 order American, Eastern, Northwest, TWA and United Air Lines to show cause why the Board should not make final its findings and conclusions with respect to rate of pay for the transportation of mail within the continental U. S., and between the U. S. and Canada (Mar. 29).

E-1356 orders American Airlines to show cause why there should not be established certain temporary mail rates to be paid it over its routes within the continental U. S., and over its routes between the U. S. and points in Canada (Mar. 29).

E-1357 orders Eastern Air Lines to show cause why there should not be established certain temporary mail rates to be paid it over its routes within the continental U. S. (Mar. 29).

E-1358 orders Northwest Airlines to show cause why there should not be established certain temporary mail rates to be paid it over its routes within the continental U. S., and over its routes between the U. S. and points in Canada.

Air Regulations . . . on July 1, 1948

TITLE	No.	PART			MANUAL		
		Price	Date	No. of Amendments	Price	Date	No. of Amendments
Aircraft							
Airworthiness Certificates	01	\$0.05	10/15/47	3	None	None	
Type and Production Certificates	02	.05	7/1/46	1	\$0.10	8/1/46	
Airplane Airworthiness—Normal, Utility, Acrobatic, and Restricted Purpose Categories	03	.25	12/15/46	4	None	None	
Airplane Airworthiness	04a	.25	11/1/47	1	.75	7/1/44	2
Airplane Airworthiness—Transport Categories	04b	Free	11/9/45	10	None	None	
Rotocraft Airworthiness	06	.10	5/24/46	2	None	None	
Aircraft Airworthiness, Limited Category	09	.05	11/21/46	1	None	None	
Engine Airworthiness	13	.05	8/1/41		None	None	
Propeller Airworthiness	14	.05	7/15/42	1	.15	5/1/46	
Equipment Airworthiness	15	.05	5/31/46		None	None	
Radio Equipment Airworthiness	16	.05	2/13/41		Free	2/13/41	1
Maintenance, Repair, and Alteration of Aircraft, Engines, Propellers, Instruments	18	.05	9/1/42		.60	6/1/43	
Airmen							
Pilot Certificates	20	.05	7/1/45	9	None	None	
Airline Pilot Rating	21	.05	10/1/42	4	None	None	
Lighter-than-air Pilot Certificates	22	.05	10/15/42	3	None	None	
Mechanic Certificates	24	.05	7/1/43	2	None	None	
Parachute Technician Certificates	25	.05	12/15/43	4	None	None	
Traffic Control Tower Operator Certificates	26	.05	10/10/45	3	None	None	
Aircraft Dispatcher Certificates	27	.05	7/1/46	1	None	None	
Physical Standards for Airmen	29	.05	1/10/46		None	None	
Flight Radio Operator Certificates	33	.05	8/1/47		None	None	
Flight Navigator Certificates	34	.05	8/1/47	1	None	None	
Flight Engineer Certificates	35	.05	3/15/47		None	None	
Operation Rules							
Air Carrier Operating Certification	40	.10	7/10/46	12	None	None	
Scheduled Air Carrier Operations Outside Continental United States	41	.05	5/1/46	22	None	None	
Nonscheduled Air Carrier Certification and Operation Rules	42	.05	8/1/46	10	.15	11/1/46	
General Operation Rules	43	.05	12/1/47	3	None	None	
Foreign Air Carrier Regulations	44	.05	11/1/47		None	None	
Operation of Moored Balloons	48	.05	9/28/47		None	None	
Transportation of Explosives and other Dangerous Articles	49	.05	7/1/45	1	None	None	
Air Agencies							
Airman Agency Certificates	50	.05	4/30/46		* 15	5/15/46	2
Ground Instructor Rating	51	.05	12/15/43	2	None	None	
Repair Station Rating	52	.05	10/1/42		No stock	2/41	
Mechanic School Rating	53	.05	8/1/42	1	Free	5/40	
Parachute Loft Certificates and Ratings	54	.05	1/21/43		None	None	
Air Navigation							
Air Traffic Rules	60	.10	10/8/47	3	(?)	None	
Scheduled Air Carrier Rules	61	.10	6/15/48	1	None	None	
Miscellaneous							
Rules of Practice Governing Suspension and Revocation Proceedings	97	Free	1/1/47	1	None	None	
Definitions	98	No stock	10/15/42		None	None	
Mode of Citation	99	Free	11/15/40		None	None	
Regulations of the Administrator							
Aircraft Registration Certificates	501	Free	5/1/47				
Dealers' Registration Certificates	502	Free	5/1/47				
Recordation of Aircraft Ownership	503	Free	5/1/47				
Notice of Construction or Alteration of Structures on or near Civil Airways	525	Free	7/23/43	1			
Seizure of Aircraft	531	Free	12/8/41				
Reproduction and Dissemination of Current Examination Materials	532	Free	1/15/43				
Federal Aid to Public Agencies for Development of Public Airports	550	Free	1/9/47		1 thru 8. In Federal Register, vol. 12, Nos. 74, 92, 112, 122, 161, 187, 198. Total cost, \$1.05.		
Acquisition by Public Agencies for Public Airport Purposes of Land Owned or Controlled by the United States	555	Free	1/9/47		1. In Federal Register, vol. 12, No. 37, 15¢.		
Claims for Reimbursement for Rehabilitation or Repair of Public Airports Damaged by Federal Agencies	560	Free	1/9/47				

¹ Certain aircraft may comply with the provisions of this part or Part 04a.

² Special regulations SR-324

³ Special regulations 396, SR-323

⁴ Special regulations 397, 397A.

⁵ SR-317.

⁶ Special regulations 397, 397A, SR-317, SR-323

⁷ Combined with Flight Information Manual, Vol. 2, No. 2.

NOTE: Those parts and manuals for which there is a price are obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Remittances should be by check or money order, payable to the Superintendent. Currency is sent at sender's risk. Amendments, Special Regulations and free Parts are obtained from the Publications Section, Civil Aeronautics Board, Washington 25, D. C.; free Manuals and Regulations of the Administrator from the CAA Office of Aviation Information, Dept. of Commerce, Washington 25, D. C.

E-1359 orders TWA to show cause why there should not be established certain temporary mail rates to be paid it over its routes within the continental U. S. (Mar. 29).

E-1361 orders American Airlines to show cause why the Board should not fix certain temporary mail rates to be paid it over its foreign route to Mexico (Mar. 29).

E-1360 orders United Air Lines to show cause why there should not be established certain temporary mail rates to be paid it over its routes within the continental U. S., and over its routes between the U. S. and points in Canada (Mar. 29).

(See Official Actions Page 81)

Scheduled Air Carrier Operations

[Source: CAB Form 41]

Domestic: January-April 1947, 1948

Operator	Revenue miles, January-April		Revenue passengers (unduplicated), January-April		Revenue passenger-miles (000), January-April		Express and freight (tons), January-April	
	1948	1947	1948	1947	1948	1947	1948	1947
Trunk Lines								
American Airlines, Inc.	15,400,388	18,653,777	685,181	779,481	322,245	394,893	14,585.0	7,895.0
Brannif Airways, Inc.	3,432,300	3,466,817	161,326	173,388	56,737	59,874	1,183.0	804.0
Chicago & Southern Air Lines, Inc.	2,079,570	2,175,762	76,612	84,474	30,615	33,200	916.0	678.0
Colonial Airlines, Inc.	761,184	786,829	33,537	33,641	9,458	9,722	101.4	79.7
Continental Airlines, Inc.	1,645,067	1,499,379	43,630	50,311	15,892	16,483	203.0	134.0
Delta Air Lines, Inc.	4,322,021	3,653,765	142,323	151,334	59,969	71,192	1,508.0	816.0
Eastern Air Lines, Inc.	16,666,561	14,580,117	649,229	542,436	367,644	317,045	4,404.7	2,940.6
Inland Air Lines, Inc.	758,751	640,066	21,026	22,992	7,600	6,692	81.0	34.1
Mid-Continent Airlines, Inc.	2,308,571	1,770,611	87,224	73,258	25,999	22,669	385.0	156.1
National Airlines, Inc.	1,175,244	3,259,598	37,563	110,276	21,292	63,818	568.4	418.6
Northeast Airlines, Inc.	937,186	1,215,729	70,108	98,222	13,042	18,489	530.3	253.5
Northwest Airlines, Inc.	4,760,779	5,535,427	161,268	182,243	83,030	91,866	1,590.5	1,092.4
Pennsylvania-Central Airlines Corp.	4,893,672	4,847,526	274,769	303,412	71,969	77,602	5,032.0	4,221.0
Transcontinental & Western Air, Inc.	16,525,357	13,817,257	335,637	265,033	253,009	203,077	5,366.0	3,548.0
United Air Lines, Inc.	17,514,391	17,405,887	478,258	509,565	277,984	310,971	10,348.0	5,871.0
Western Air Lines, Inc.	1,971,533	2,487,344	83,746	142,657	32,192	54,298	748.0	702.9
Trunk total.....	95,151,575	95,795,891	3,341,437	3,522,723	1,648,677	1,751,891	47,550.3	29,650.9
Index (1947=100).....	99.33	100.00	94.85	100.00	94.11	100.00	160.37	100.00
Feeder Lines								
All American Aviation, Inc.	533,808	561,417	0	0	0	0	62.2	55.6
Challenger Airlines Co.	419,320	-	4,435	-	1,024	-	44.0	-
Empire Air Lines, Inc.	309,313	291,830	4,480	2,678	1,001	588	10.0	3.3
Florida Airways, Inc.	276,194	166,222	4,028	1,514	539	210	15.0	5.4
Los Angeles Airways, Inc.	70,107	-	0	-	0	-	0.0	-
Monarch Air Lines, Inc.	475,921	262,968	5,817	2,777	1,314	546	107.0	31.5
Piedmont Aviation, Inc.	141,894	-	2,572	-	649	-	6.0	-
Pioneer Air Lines, Inc.	806,083	461,193	21,911	12,940	5,698	3,528	36.0	14.0
Southwest Airways Co.	651,469	342,158	20,313	14,168	3,853	2,375	161.0	34.0
Trans-Texas Airways	439,414	-	3,497	-	782	-	12.0	-
West Coast Airlines, Inc.	366,919	139,597	16,759	5,896	2,009	629	26.3	7.8
Wisconsin-Central Airlines, Inc.	111,696	-	988	-	163	-	9.6	-
Feeder total.....	4,602,138	2,225,385	84,800	39,973	17,032	7,876	489.1	151.6
Index (1947=100).....	206.80	100.00	212.14	100.00	216.25	100.00	322.63	100.00
Territorial Lines								
Caribbean-Atlantic Airlines, Inc.	130,659	131,782	25,735	22,229	1,599	1,362	28.4	25.7
Hawaiian Airlines, Ltd.	951,468	747,628	100,868	86,647	14,104	11,956	1,535.0	740.0
Territorial total.....	1,082,127	879,410	126,603	108,876	15,703	13,318	1,563.4	765.7
Index (1947=100).....	123.05	100.00	116.28	100.00	117.91	100.00	204.18	100.00
GRAND TOTAL.....	100,835,840	98,900,686	3,552,840	3,671,572	1,681,412	1,773,085	49,602.8	30,568.2
Index (1947=100).....	101.96	100.00	96.77	100.00	94.83	100.00	162.27	100.00
Operator	Ton-miles flown				Passenger seat-miles (000), January-April		Revenue passenger load factor (percent), January-April	
	Express, January-April	Freight, January-April	1948	1947	1948	1947	1948	1947
Trunk Lines								
American Airlines, Inc.	1,707,197	1,607,742	5,634,161	2,466,518	542,663	581,746	59.38	67.88
Brannif Airways, Inc.	279,510	261,333	344,080	83,396	105,981	98,684	53.54	60.67
Chicago & Southern Air Lines, Inc.	203,100	205,020	154,477	67,763	54,917	56,963	55.75	58.39
Colonial Air Lines, Inc.	16,405	15,150	8,397	0	15,930	15,468	59.37	62.85
Continental Air Lines, Inc.	30,418	26,168	63,564	34,058	33,871	30,885	46.92	53.37
Delta Air Lines, Inc.	291,904	243,758	462,636	171,421	119,533	106,415	50.17	66.90
Eastern Air Lines, Inc.	1,305,386	1,302,794	1,070,900	462,460	588,453	449,302	62.48	70.56
Inland Air Lines, Inc.	15,118	8,265	16,281	4,462	14,688	12,214	51.74	54.79
Mid-Continent Airlines, Inc.	56,466	40,366	73,285	14,228	45,752	35,706	56.83	63.49
National Airlines, Inc.	203,466	106,267	299,379	236,978	44,107	93,155	48.27	68.51
Northeast Airlines, Inc.	33,937	35,171	42,021	3,350	31,382	39,234	41.56	47.12
Northwest Airlines, Inc.	529,466	514,810	447,948	136,966	154,869	152,100	53.61	60.40
Pennsylvania-Central Airlines Corp.	649,947	760,014	1,308,525	583,444	152,927	158,026	47.06	49.11
Transcontinental & Western Air, Inc.	1,871,722	1,793,700	2,769,691	1,144,742	426,891	322,416	59.27	62.99
United Air Lines, Inc.	2,306,025	2,147,346	5,335,744	2,565,806	443,434	426,723	62.69	72.87
Western Air Lines, Inc.	91,391	155,000	223,379	132,741	61,928	92,762	51.98	58.53
Trunk total.....	9,591,508	9,223,063	18,254,468	8,108,333	2,837,326	2,671,699	58.11	65.57
Index (1947=100).....	104.00	100.00	225.13	100.00	106.20	100.00	88.62	100.00
Feeder Lines								
All American Aviation, Inc.	8,641	8,336	0	0	0	0	-	-
Challenger Airlines Co.	4,161	-	9,774	-	8,806	-	11.63	-
Empire Air Lines, Inc.	1,880	587	0	0	4,581	2,915	21.85	20.17
Florida Airways, Inc.	1,538	490	0	0	2,163	1,100	24.92	19.09
Los Angeles Airways, Inc.	0	-	0	-	0	-	-	-
Monarch Air Lines, Inc.	3,392	4,097	19,709	1,241	8,576	4,120	15.32	13.25
Piedmont Aviation, Inc.	771	-	568	-	2,979	-	21.79	-
Pioneer Air Lines, Inc.	5,188	4,245	5,437	0	19,382	11,127	29.40	31.71
Southwest Airways Co.	7,504	4,113	21,773	0	12,939	6,290	29.78	37.76
Trans-Texas Airways	1,509	-	709	-	9,228	-	84.74	-
West Coast Airlines, Inc.	2,869	624	0	0	6,814	2,884	29.48	21.81
Wisconsin-Central Airlines, Inc.	1,291	-	0	-	977	-	16.68	-
Feeder total.....	38,744	22,492	57,970	1,241	76,445	28,436	22.28	27.70
Index (1947=100).....	172.26	100.00	4,671.23	100.00	268.83	100.00	80.43	100.00
Territorial Lines								
Caribbean-Atlantic Airlines, Inc.	0	0	1,919	2,947	3,255	3,204	49.12	42.51
Hawaiian Airlines, Ltd.	43,029	33,185	100,300	161,715	20,857	15,329	67.62	78.00
Territorial total.....	43,029	33,185	182,219	164,662	24,112	18,533	65.13	71.86
Index (1947=100).....	129.66	100.00	110.66	100.00	130.10	100.00	90.63	100.00
GRAND TOTAL.....	9,673,281	9,278,680	18,494,657	8,274,236	2,937,883	2,718,668	57.23	65.22
Index (1947=100).....	104.25	100.00	223.52	100.00	108.06	100.00	87.75	100.00

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Scheduled Air Carrier Operations—Concluded

Domestic: April 1948

Operator	Revenue miles	Revenue passengers (unduplicated)	Revenue passenger-miles (000)	Express and freight (tons)	Ton-miles flown		Passenger seat-miles (000)	Revenue passenger load factor (percent)
					Express	Freight		
Trunk Lines								
American Airlines, Inc.	4,314,048	222,653	97,794	3,863.0	435,117	1,527,089	154,091	63.47
Braniff Airways, Inc.	914,342	48,222	16,873	306.0	67,140	93,294	28,103	60.04
Chicago & Southern Air Lines, Inc.	567,763	23,643	9,292	231.0	50,982	38,839	14,959	62.12
Colonial Air Lines, Inc.	208,317	9,933	2,771	31.3	4,443	2,981	4,341	63.83
Continental Airlines, Inc.	440,253	12,906	4,066	63.0	7,688	19,825	9,669	54.67
Delta Air Lines, Inc.	1,151,050	45,313	16,179	410.0	72,001	123,144	29,484	54.87
Eastern Air Lines, Inc.	4,264,489	183,146	92,108	1,102.9	289,947	412,055	144,991	63.53
Inland Air Lines, Inc.	191,039	5,660	2,902	26.0	4,129	5,127	3,777	53.01
Mid-Continent Airlines, Inc.	656,768	26,314	7,782	117.0	14,532	25,996	13,170	59.05
National Airlines, Inc.	267,397	7,535	5,098	112.3	58,250	45,178	12,640	40.33
Northeast Airlines, Inc.	246,910	22,232	4,117	137.7	8,143	13,287	8,597	47.89
Northwest Airlines, Inc.	1,339,987	50,846	25,749	442.9	136,257	147,880	45,090	57.39
Pennsylvania-Central Airlines Corp.	1,443,111	88,167	23,845	1,292.0	159,276	361,984	47,466	50.24
Transcontinental & Western Air, Inc.	4,365,082	100,868	69,823	1,402.0	454,007	722,964	112,606	62.01
United Air Lines, Inc.	4,840,854	146,594	87,368	2,586.0	556,431	1,500,974	130,146	67.13
Western Air Lines, Inc.	498,759	21,793	8,333	197.0	26,062	60,494	15,115	55.13
Trunk Total	25,710,169	1,014,525	473,950	12,422.1	2,344,405	5,101,661	773,654	61.26
Feeder Lines								
All American Aviation, Inc.	149,333	0	0	20.4	2,734	0	0	-
Challenger Airlines Co.	110,498	1,179	250	11.0	1,114	2,485	2,320	10.78
Empire Air Lines, Inc.	80,609	1,600	358	3.0	528	0	1,692	21.16
Florida Airways, Inc.	70,083	1,737	215	7.2	758	0	539	39.89
Los Angeles Airways, Inc.	18,395	0	0	0.0	0	0	0	-
Monarch Air Lines, Inc.	126,406	1,783	414	33.0	1,102	6,751	2,274	18.21
Piedmont Aviation, Inc.	88,410	1,634	402	4.0	501	397	1,856	21.66
Pioneer Air Lines, Inc.	224,639	7,418	1,938	12.0	1,446	2,170	5,392	35.94
Southwest Airways Co.	172,263	5,728	1,053	39.0	1,701	5,602	3,610	29.17
Trans-Texas Airways.	117,661	1,108	238	5.0	835	250	2,471	9.63
West Coast Airlines, Inc.	99,756	5,917	679	8.1	904	0	1,894	35.85
Wisconsin-Central Airlines, Inc.	61,351	645	104	4.9	667	0	1,546	19.05
Feeder Total	1,319,404	28,749	5,651	147.6	12,290	17,655	22,594	25.01
Territorial Lines								
Caribbean-Atlantic Airlines, Inc.	32,363	5,912	367	6.8	0	468	812	45.20
Hawaiian Airlines, Ltd.	230,165	23,347	3,265	365.0	11,338	40,212	5,051	64.64
Territorial Total	262,528	29,259	3,632	371.8	11,338	40,680	5,863	61.95
GRAND TOTAL	27,292,101	1,072,533	483,233	12,941.5	2,368,033	5,159,996	802,111	60.25

Passenger-miles flown (total revenue and nonrevenue, in thousands): *January February March April Total*

Trunk lines.....	406,599	364,344	447,405	492,435	1,710,783
Feeder lines.....	4,006	3,535	5,373	6,360	19,274
Territorial lines.....	4,097	3,859	4,225	3,690	15,871

Total.....

414,702 371,738 457,003 502,485 1,745,928

International and Overseas: March 1948

Operator	Revenue miles	Revenue passengers (unduplicated)	Revenue passenger-miles (000)	Express and freight (tons)	Ton-miles flown		Passenger seat-miles (000)	Revenue passenger load factor (percent)
					Express	Freight		
American Airlines, Inc.								
American Overseas Airlines, Inc.	188,038	4,462	3,646	191.0	0	116,886	6,484	56.23
Chicago & Southern Air Lines, Inc.	483,619	3,431	7,821	56.2	156,087	0	18,163	43.06
Colonial Airlines, Inc.	42,470	784	537	15.0	0	10,545	1,911	28.10
Eastern Air Lines, Inc.	60,665	1,960	1,538	7.2	0	5,573	2,624	58.61
National Airlines, Inc.	62,520	1,068	1,111	24.9	0	47,609	3,492	31.82
Northwest Airlines, Inc.	36,020	2,006	615	107.6	29,290	0	1,657	37.12
Pan American Airways, Inc.	369,495	2,094	4,802	26.0	3,303	88,793	8,922	53.82
Atlantic Division.....	1,034,499	9,499	18,686	113.3	381,930	0	31,729	58.89
Latin American Division.....	2,429,331	6,641	47,256	1,151.0	1,562,876	0	89,778	52.87
Alaska Operations.....	208,522	2,045	2,214	129.0	180,859	0	6,436	34.40
Pacific Operations.....	1,221,306	6,627	20,935	94.0	312,006	0	29,998	69.79
Pan American-Grace Airways, Inc.	476,609	8,642	9,538	121.0	126,043	2,604	14,231	67.02
Transcontinental & Western Air, Inc.	909,145	4,742	14,701	67.0	277,430	0	29,981	49.03
United Air Lines, Inc.	144,000	1,000	2,400	4.0	9,972	0	4,965	48.34
Uruba, Medellin & Central Airways, Inc.	12,648	245	82	15.0	5,143	0	171	47.95
Total	7,678,887	113,246	135,882	2,122.2	3,044,939	272,010	250,142	54.32

CAB Official Actions

(Continued from Page 79)

E-1363 orders United Air Lines to show cause why the Board should not fix certain temporary mail rates to be paid it over its overseas route to Hawaii (Mar. 29).

E-1364 denies motions of Colonial Airlines to disqualify Member Harilee Branch from taking any further part in the Boston-New York-New Orleans Case and Middle Atlantic Area Case; denies request of Mr. Branch to be relieved from further participation in above proceedings. (Issued with an opinion—Mar. 30.)

E-1365 reissues temporary certificate issued to Wisconsin Central Airlines for route 86 (Order E-846) so as to reflect the change in corporate name from Wisconsin Central Airlines to Wisconsin Central Airlines, Inc. (Apr. 5).

E-1366 and 1367, respectively, approve interlocking relationships existing as a result of Laurance H. Cooper's and L. M. MacArthur's holding certain positions within Transair, Inc., Aero Industries Corp., and Propeller Service Corp. (Apr. 6).

E-1368 and E-1369, respectively, approve interlocking relationships existing as a result of S. Hoyt Sayer's and Harry S. Newman's holding certain positions within Transair, Inc. and Aero Industries Corp. (Apr. 6).

E-1370 amends temporary mail rate order E-895 issued to Challenger Airlines Co., so as to increase the temporary mail rate established for that carrier (Apr. 7).

E-1371 authorizes Robert C. Reeve, doing business as Reeve Airways, to engage in air transportation for 5 years between points in Alaska and the Aleutian Islands and the Pribilof Islands. (Issued with an opinion—Jan. 23.)

E-1372 denies motion of Colonial Airlines to stay and suspend indefinitely Board order E-1211 in The Middle Atlantic Area Case (Apr. 8).

E-1373 denies petition of the Post Office Dept. for an order suspending temporarily the effect of the (See Official Actions Page 82)

CAB Official Actions

(Continued from Page 81)

Board's order—E-1211—in the Middle Atlantic Area Case, and staying the effectiveness of all certificates and amendments issued pursuant to the aforementioned order (Apr. 8).

E-1374 orders Chicago and Southern Air Lines to show cause why the Board should not fix a certain temporary mail rate to be paid it over its Latin American route (Apr. 9).

E-1375 denies motion for postponement of disposition of Northeast Airlines' exceptions, for a temporary mail rate pending disposition of such exceptions, for further hearing, and for oral argument on the carrier's exceptions; makes effective the permanent mail rate provided in order E-1230. (Issued with an opinion—Apr. 9.)

E-1376 and 1377, respectively, dismiss applications of Brinckerhoff Flying Service and United Air Lines (Apr. 9).

E-1378 and 1379, respectively, dismiss applications of Leland P. Johnson and Skylines, Inc., for want of prosecution (Apr. 9).

E-1380 dismisses application of Van Dyke Airport Service (Apr. 9).

E-1381 dismisses application of Mrs. Winifred L. Sheffler, for want of prosecution (Apr. 9).

E-1382 denies request of Colonial Airlines for expeditious action and immediate hearing in Dockets 3051, 3052 and 3053 (Apr. 9).

E-1383 dismisses exceptions filed by Air Line Pilots Assn., International to the order issued on Mar. 29, 1948, establishing a temporary mail rate for National Airlines (Apr. 9).

E-1384 authorizes Western Air Lines to suspend service temporarily at Palm Springs, Calif., on route 13 from May 3 to Oct. 31, 1948 (Apr. 9).

E-1385 authorizes Challenger Airlines Co. to change their service pattern so as to omit Kemmerer, Wyo., as a stop during hours of darkness (Apr. 9).

E-1386 authorizes Wisconsin Central Airlines to suspend service until May 1, 1948, at Clintonville, Wis. (Apr. 9).

E-1387 grants Wisconsin Central Airlines an exemption from the provisions of section 401 (a) of the Act, so as to permit it to operate directly between Wausau and Oshkosh, Wis. (Apr. 9).

E-1388 grants Trans-American Airlines a temporary exemption from the provisions of sec. 401 (a) of the Act, so as to permit it to engage in foreign air transportation between Chicago, Ill., and points in Canada (Apr. 9).

E-1389 dismisses application of Santa Fe Skyway (Apr. 12).

E-1390 dismisses application of Atchison, Topeka and Santa Fe Railway, docket No. 2626 (Apr. 12).

E-1391 dismisses application of Hinck Flying Services, Inc., docket No. 2654. (Apr. 12).

E-1392 authorizes Pan American-Grace Airways to suspend service temporarily at Uyuni, Bolivia, on route No. FAM-9, for a period of one year (Apr. 12).

E-1393 grants Air France permission to serve Boston, Mass., on April 14, 1948, through the use of Logan Airport (Apr. 12).

E-1394 grants Florida Airways a temporary exemption from the provisions of section 401(a) of the Act, so as to permit it to operate directly between Jacksonville and Tallahassee, Jacksonville and Lake City, and Tallahassee and Lake City, Fla. (Apr. 13).

E-1395 dismisses application of Braniff Airways, docket No. 2952 (Apr. 13).

E-1396 approves agreements CAB Nos. 1098, 1279, 1287, 1330, 1350, 1352 and 1363 between certain domestic and foreign air carriers relating to handling of international air cargo (Apr. 14).

E-1397 dismisses applications of Prairie Airways, docket Nos. 1347 and 2315 (Apr. 15).

E-1398 grants the City of Richmond, Va., the Richmond Chamber of Commerce and Trans-Texas Airways permission to intervene in the Air Freight Case (Apr. 15).

E-1399 denies petition of New Mexico Airlines requesting that the Board reopen the Texas-Oklahoma Case for receipt of certain evidence; denies motion of Texas-New Mexico Airlines for reconsideration of certain matters in the Texas-Oklahoma Case, and reopening of the record in the Arizona-New Mexico Case (Apr. 12).

E-1400 institutes a proceeding to determine whether the public convenience and necessity require amendment of one or more of the certificates held by certain air carriers to authorize service to and from Pecos, Tex. (Apr. 12).

E-1401 denies petitions of the Chamber of Commerce of Dallas and Fort Worth, Tex., for leave to intervene in the Arizona-New Mexico Case (Apr. 12).

E-1402 denies petition of TWA for reconsideration and reargument of the Board's supplemental opinion and order of February 4, 1948, order serial No. E-1195, in the Great Lakes Area Case. (Apr. 12).

Civil Aviation Highlights

	1948	1947
Airports Recorded with CAA, June 1.	6,143	5,074
By Type: ¹		
Commercial.....	3,002	2,383
Municipal.....	1,934	1,612
CAA intermediate.....	165	189
Military.....	437	660
All others.....	605	230
Civil airports by class:		
Total.....	5,706	4,414
Class I and under.....	3,858	2,932
Class II.....	878	767
Class III.....	439	369
Class IV.....	341	243
Class V.....	109	73
Class VI and over.....	71	30
	1,005	888
Scheduled air carrier aircraft, June 1.		
Civil aircraft production, April:		
Total.....	772	2,038
2-place models.....	461	964
3- and 4-place models.....	277	1,042
Over 4-place models.....	34	32
Certificates Approved, April:		
Student pilots.....	13,866	17,659
Private pilots.....	6,877	8,450
Commercial pilots.....	796	705
Airline transport pilots.....	99	157
Mechanics (original certificates).....	921	1,397
Ground instructors (original certificates).....	266	409
Flight instructor ratings.....	364	616
Instrument ratings.....	128	238
Traffic Control Activity, April:		
Aircraft operations, CAA airport towers.....	1,744,196	1,404,148
Fix postings, CAA airway centers.....	777,620	828,569
Washington National Airport operations, May:		
Scheduled air carrier:		
Passengers departing.....	59,713	63,454
Passengers arriving.....	58,281	57,959
Aircraft arrivals and departures.....	15,033	9,899
Other aircraft arrivals and departures.....	4,434	5,656
San Francisco Municipal Airport operations, April:		
Scheduled air carrier:		
Passengers departing.....	34,405	36,478
Passengers arriving.....	34,058	35,152
Aircraft arrivals and departures.....	6,110	4,994
Other aircraft arrivals and departures.....	4,563	10,834
Oakland Municipal Airport operations, April:		
Scheduled air carrier:		
Passengers departing.....	3,918	5,188
Passengers arriving.....	3,671	4,391
Aircraft arrivals and departures.....	3,661	2,914
Other aircraft arrivals and departures.....	16,149	14,755
Miami International Airport operations, April:		
Scheduled air carrier:		
Passengers departing.....	42,901	(2)
Passengers arriving.....	38,735	(2)
Aircraft arrivals and departures.....	5,990	6,817
Other aircraft arrivals and departures.....	8,932	12,511
1 For airport type definitions see "Civil Aviation Highlights", Civil Aeronautics Journal, March 15, 1948.		
2 Not available.		
E-1403 approves agreement between Eastern Air Lines and National Airlines, relating to lease of space at Philadelphia Southwest Airport (Apr. 15).		
E-1404 fixes a temporary mail rate to be paid Ellis Air Lines over its Ketchikan-Juneau route (Apr. 16).		
E-1405 reopens the Mississippi Valley Case and the Southeastern States Case for reconsideration of certain portions; rescinds certain paragraphs in order serial No. E-1066 (Apr. 2).		
E-1406 approves agreement between Braniff Airways and Pan American Airways relating to services at the Houston Municipal Airport (Apr. 16).		
E-1407 approves agreement between United Air Lines and Hawaiian Automobile Transport Co., relating to ground transportation (Apr. 16).		
E-1408 dismisses application of Central Aeronautical Corp. in docket No. 68-401-E-1 (Apr. 19).		
E-1409 grants Tourism Advisory Board of the Insular Government, Puerto Rico, leave to intervene in the matter of fares established, demanded and charged by Pan American (Apr. 19).		
E-1410 grants Piedmont Aviation permission to serve Danville and Roanoke, Va., on April 15, 1948, through the use of Danville Municipal Airport and Woodrum Field, respectively (Apr. 19).		
E-1411 denies petition of Australian National Airways objecting to the public disclosure of information contained in agreements CAB Nos. 1359 and 1529 between Pan American and Australian National Airways relating to exchange of services and facilities (Apr. 20).		
E-1412 approves agreements CAB Nos. 245 A5, 1626, 1627, 1628, 1629, 1670, 1683, 1725, 1804, 1805, 1806, 1807, 1808, 1809 and 1810 between various air carriers as members of the Air Traffic Conference of America relating to reservation procedures (Apr. 20).		
E-1413 grants Gregg County, Tex., permission to intervene in the matter of the application of Delta Air Lines, docket No. 3304 (Apr. 20).		
E-1414 approves agreement between American Airlines and Western Air Lines relating to consolidation of services (Apr. 21).		
(See Official Actions Page 83)		

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Instruments Not in Use.—Flying into instrument weather without the training and experience required to control the airplane safely without reference to the ground was cited by the CAB as the probable cause of a crash near Lakeview, Oreg., in which Gov. Earl Snell of Oregon and three other persons were fatally injured.

Clifford W. Hogue, pilot, with Governor Snell, Robert S. Farrell, Jr., Oregon Secretary of State, and Marshall E. Cornett, President of the Oregon State Senate, as passengers, departed from Salem, Oreg., for a hunting trip to Adel, Oreg. Low ceilings were encountered en route. Accordingly it was decided to discontinue the flight at Klamath Falls, Oreg., and continue to Adel the following morning. The aircraft landed safely at Klamath Falls, was serviced, and placed in a hangar.

At approximately 9 p. m., Mr. Hogue called a Mr. Kittredge, then in Lakeview, who reported that there was rain and occasional snow falling in the mountains between Adel and Lakeview and that he did not believe the aircraft could be flown to Adel. Mr. Hogue asked about Lakeview. Mr. Kittredge stated that he could see Dog Mountain, approximately 20 miles away, and that there were clouds over the mountain ridges to the north, though moonlight was visible beneath them.

Since the weather at Klamath Falls and Lakeview appeared to be satisfactory for contact flight, the party decided to take-off in an attempt to fly to Adel. Mr. Kittredge was requested to drive to Coleman Lake, a dry lake located immediately north of Adel, in order that the aircraft could be landed on the dry hard surface of the lake with the aid of the automobile headlights. Mr. Hogue told Mr. Kittredge that if it was impossible to reach Adel, he would return and land at Lakeview.

Thirty minutes after Mr. Hogue had taken off from Klamath Falls, a cowboy residing about 21 miles southwest of Lakeview heard an aircraft flying very low overhead. He stated that the engine roared intermittently as if the pilot were stunting, and it sounded as though the aircraft were being flown in a westerly direction. There was heavy rain in this location and visibility was very restricted. About 2 minutes after the aircraft had been first heard, all sound from it stopped suddenly and the cowboy believed that the airplane had crashed.

The aircraft struck the ground in a wooded and mountainous area 23 miles southwest of Lakeview, at an elevation of 5,500 feet. No indication was found that there had been any mechanical malfunction or structural failure prior to the time that the aircraft struck the ground. The airplane was equipped with the necessary instruments and radio for night and instrument flying. However, the radio equipment, both for receiving and transmitting, was not in operating order during the time of this flight. Mr. Hogue had a total of 5,900 flying hours, of which 1,600 had been obtained in the capacity of instructor, but there was no showing that he had at any time received instruction or training in instrument flying.

The CAB found that all available evidence indicated that the pilot encountered instrument weather conditions, and because of his inability to handle the aircraft by reference to instruments alone, lost control of it and crashed.

Spin Causes Fatality.—Robert L. Burns, a private pilot, received minor injuries and his passenger, James Bennett Day, was killed in a plane crash near Dallas, Tex., after Burns was unable to recover from a spin and jumped from the plane. The plane was demolished.

Pilot Burns, occupying the rear seat, and Day the front, took off from Clearview Airport, Dallas, for a local pleasure flight. Both wore parachutes. The pilot executed a series of aerobatics consisting of a

loop, snap roll and slow roll, then climbed to 4,000 feet and entered a spin to the left. Burns stated that upon completion of 3½ turns he attempted to recover but was unable to do so; that he then told his passenger to jump and that he himself left the plane at an altitude of about 1,200 feet. After the pilot jumped the plane stopped spinning but continued to the ground in a spiral. Passenger Day remained in the aircraft and was killed on impact.

He Flew Too Low.—Loss of control at an altitude too low for recovery was given by the CAB as the probable cause of an accident near Fulton, Mo., in which Jesse E. Richardson, a private pilot, and A. C. Baumann, a passenger, both of Columbia, Mo., were fatally injured.

The pilot circled low over a clay pit near Fulton where his uncle was working. During this circling the engine stopped, following which the aircraft stalled and dived to the ground. Examination of the wreckage disclosed no evidence of mechanical failure or malfunctioning of the engine or any part of the aircraft prior to impact. The weather was clear with a WSW wind of 10 mph.

However, the fuel shut-off valve was found closed. The elevator trim tab was in an almost full tail-down position and the CAB found that it appeared probable Pilot Richardson, intending to land in a field adjacent to the clay pit, attempted to apply carburetor heat before reducing engine power and inadvertently closed the near by and very similar fuel valve control, thereby cutting off the fuel supply.

Insufficient Air Speed Blamed.—A miss-approach procedure attempted for a second landing try without sufficient air speed was given by the CAB as the probable cause of an accident when an American Airlines aircraft crashed into Bowery Bay, approximately 1,350 feet off the approach end of runway 13 of LaGuardia Airport. Both of the pilots and one of three mechanics aboard lost their lives. No passengers were carried. The aircraft was substantially damaged.

The aircraft was cleared on an instrument flight to Rochester, N. Y. Approximately two minutes after take-off the flight called LaGuardia Tower and reported that oil pressure was low on one engine. Clearance to land was requested and approved.

The flight was given clearance to land on runway 22 but passed over the approach end of the runway at an altitude of approximately 300 feet. The flight then requested and was granted permission by the tower to make a right turn. However, the aircraft continued straight ahead over the runway, gradually losing altitude.

When one-third of the way down the runway, the right propeller was feathered. When over the intersection of runways 22 and 18 and at an altitude of 200 feet the flaps were raised, which resulted in an additional loss of altitude. During or directly after raising the flaps, a right turn was initiated, and the landing gear was observed to retract slowly. Competent witnesses stated that the right turn was made at a very slow speed, at a high angle of attack and at an altitude appearing never to have exceeded 200 feet.

Over Bowery Bay the aircraft on two occasions almost settled into the water. When in a flat right turn towards runway 13, it lost altitude to about 50 feet. Approximately 2,000 feet from the end of the runway, the landing gear started to extend and became fully extended when the aircraft was aligned with runway 13. At this time the airplane attitude appeared to be that of a steep climb. The wings were seen to wobble slightly, then the left wing and nose dropped, and the airplane struck the water at an angle of approximately 20 degrees. The aircraft continued on the surface of the water 40 to 50 feet, turned over and sank in about 5 minutes.

CAB Official Actions

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E-1415 Opinion and order determines and prescribes lawful minimum rates for the transportation of freight by air; denies motion of Eastern Air Lines that proceedings be dismissed in the Air Freight Rate Investigation (Apr. 21).

E-1416 dismisses application of Wisconsin Airways, docket No. 2176 (Apr. 22).

E-1417 Opinion and order amends certificate of Pan American so as to remove restrictions prohibiting Juneau-Ketchikan service. Substitutes condition that carrier shall serve Ketchikan and Juneau on the same flight only when flight originates at Seattle, Wash., and terminates at Fairbanks, Alaska, or originates at Fairbanks, Alaska, and terminates at Seattle, Wash. (Signed by the President Apr. 21).

E-1418 issues an amended temporary certificate to Pioneer Air Lines for route No. 64 (Apr. 22).

E-1419 dismisses notice of an additional stop at Talara, Peru, filed by Peruvian International Airways on April 12, 1948 (Apr. 22).

E-1420 consolidates certain applications pertaining to air transportation between the United States and the Territory of Alaska, to be known as the "United States-Alaska Service Case" (Apr. 22).

E-1421 dismisses application of Thompson Airways for want of prosecution (Apr. 23).

E-1422 dismisses application of Cincinnati Aircraft Service for want of prosecution (Apr. 23).

E-1423 dismisses application of Harry Earl Homeyer for want of prosecution (Apr. 23).

E-1424 dismisses application of Monarch Air Service for want of prosecution (Apr. 23).

E-1425 dismisses application of Hylan Flying Service for want of prosecution (Apr. 23).

E-1426 dismisses application of Richmond Air Transport and Sales Corp., for want of prosecution (Apr. 23).

E-1427 dismisses application of Unger Aircraft, Inc., for want of prosecution (Apr. 23).

E-1428 dismisses application of George McEntire, Jr., for want of prosecution (Apr. 23).

E-1429 dismisses application of Robertson Aircraft Corporation for want of prosecution (Apr. 23).

E-1430 dismisses application of Charlotte Flying Service, Inc., for want of prosecution (Apr. 23).

E-1431 dismisses application of Airways, Inc., for want of prosecution (Apr. 23).

E-1432 dismisses application of Portland Flying Service for want of prosecution (Apr. 23).

E-1433 dismisses application of Reed W. Pigman for want of prosecution (Apr. 23).

E-1434 dismisses application of Robert J. Jacquot for want of prosecution (Apr. 23).

E-1435 dismisses application of Howard A. Morey for want of prosecution (Apr. 23).

E-1436 dismisses application of Benjamin Cole, doing business as Airlines Charter Service, for want of prosecution (Apr. 23).

E-1437 approves acquisition of control of Consolidated Vultee Aircraft Corp. by Atlas Corporation (Apr. 23).

E-1438 orders that the Board hear oral argument to determine issues concerning petitions and complaints filed by Panagra and Pan American requesting hearing with respect to the Latin American certificate of Braniff Airways (Apr. 23).

E-1439 approves agreement between Pan American and Compania Mexicana de Aviacion relating to traffic office at Merida (Apr. 26).

E-1440 approves agreement between American and Braniff relating to handling of international baggage and cargo (Apr. 26).

E-1441 approves agreements between Pan American and United, relating to interline ticketing (Apr. 26).

E-1442 dismisses application of Brayton Flying Service, docket No. 2498 (Apr. 26).

E-1443 rescinds order serial No. E-1225 denying Memphis Chamber of Commerce leave to intervene in the Continental Route Consolidation Case; grants leave to intervene (Apr. 26).

E-1444 dismisses certain individual and air carrier applications for approval of interlocking relationships (Apr. 26).

E-1445 denies petitions of Emery Air Freight Corp., Air Dispatch, and the Air Freight Association for reconsideration of the Board's order serial No. E-1343 denying petitions requesting exemption of indirect air carriers from provisions of the Act (Apr. 26).

E-1446 denies petitions of Railway Express Agency and the Air Freight Association for reconsideration of the Board's order serial No. E-1344 (Apr. 26).

E-1447 approves agreement between American Airlines and National Airlines for rental space (Apr. 26).

E-1448 approves cancellation of agreement CAB No. 1018 between American Airlines and Hartford Package Delivery relating to pick-up delivery services (Apr. 26).

E-1449 approves agreement between United and Continental, relating to passenger services and communication facilities at Cheyenne (Apr. 26).

E-1450 dismisses application of All American Aviation, Inc. (Apr. 26).

E-1451 grants Pioneer Air Lines permission to inaugurate service at Albuquerque, Clovis, Las Vegas, Santa Fe and Tucumcari, N. Mex., on May 1, 1948, through the use of Albuquerque Municipal Airport, Clovis Army Air Base, Las Vegas Municipal Airport, Santa Fe Municipal Airport and Tucumcari Municipal Airport, respectively (Apr. 26).

E-1452 fixes a temporary mail rate to be paid Cordova Air Service, over its Cordova-Katalla-Cape Yakataga route (Apr. 26).

E-1453 denies petitions of Alaska Airlines for reconsideration of the Board's order serial No. E-730, dated Aug. 1, 1947, denying petitioner's application for a temporary exemption from the provisions of section 401 (a) of the Act (Apr. 26).

E-1454 approves agreement between American Airlines and Western Air Lines relating to the use of the ramp house at Lockheed Air Terminal (Apr. 27).

E-1455 approves agreement between Eastern, United and TWA relating to allocation of charges and services at Washington National Airport (Apr. 27).

E-1456 approves agreement between American and PCA relating to the lease of certain ticket counter space and wall space at Charleston, W. Va. (Apr. 27).

E-1457 approves agreement between Pan American and Eastern relating to the servicing of aircraft at Brownsville, Tex. (Apr. 27).

Weed-Killing Dust Ban Seeks to Avoid Damage To Broad-Leaf Crops

Dusting of weed-killing 2,4-D dust from airplanes has been prohibited by D. W. Rentzel, Administrator of Civil Aeronautics, at the request of the Department of Agriculture, following many complaints that drifting dust had injured cotton and other broad-leaf crops.

When waivers are issued to operators using aircraft for dusting or spraying, a special provision will be included which will prohibit the use of 2,4-D in dust form. The restriction will not apply to 2,4-D sprays, or to insecticide dusts such as are used to destroy the boll weevil.

Agriculture's recommendation to the CAA is the outgrowth of a House Resolution introduced by Representative Clark W. Thompson, of the Ninth District, Texas, and passed by the House, calling upon the Secretary of Agriculture to take action to prevent damage to valuable crops as a result of 2,4-D dust. Damage to date has resulted from dusting rather than spraying. Weed experts of the Department are now making test flights to study the drift of 2,4-D sprays at various altitudes and under varying wind conditions. When these tests are completed, the results will be used as a basis for further action by the two departments to safeguard crops.

Plane Use on Farms Increases.—"We are charged with sponsoring and promoting the development of civil aviation," Mr. Rentzel said, "and I know of no other part of civil aviation that is developing so promisingly and so rapidly as this use of the airplane in agricultural activities. Certainly, any injury to any crop by an airplane operator is going to hurt his business, and also hurt this part of civil aviation. Spray is available, is more controllable and is just as easy to apply, and I believe all operators will cooperate with us in making the change, both for their own protection and for the sake of this growing aviation business."

The chemical 2,4-D was developed during the war by Agriculture Department scientists as an effective weed killer for many of the most troublesome weeds common on farms or on city lawns. It kills most broad-leaved plants but is not injurious to most members of the grass family when properly used. Because of this fact, it is now widely used to control bindweed and other broad-leaved weeds in grain fields. It is being used with good results on weeds in corn, which is a member of the grass family.

To Protect Life and Property.—Waivers issued by CAA Agents in the field are necessary for this activity because dusting and spraying airplanes require exemptions from the usual operating restrictions in the Civil Air Regulations. The CAA is empowered to write conditions in these waivers to protect life and property on the ground.

This year, thousands of acres of grain crops in the Midwest have been treated by this method of controlling weeds. One operator has a score of airplanes, a fleet of trucks and nearly 100 pilots and helpers in constant operation. No other use of the airplane is being so vigorously promoted, and few uses have shown such profitable results.

Agriculture weed-control specialists also warned against careless use of dusts under other conditions. When dust is applied from ground equipment it should be done with extreme caution, they advise. This applies to small spot dusters used for individual weeds as well as large-scale use.

New Members Meet With CAA Advisory Committee



Members of the Civil Aeronautics Administration's Non-Scheduled Flying Advisory Committee are shown at their recent meeting in Washington. From left to right, seated around the table, they are: Leighton Collins, New York, Editor of Air Facts; Harvey L. Casebeer, Butte, Mont., physician; Lynn D. Bollinger, Boston, Director of Aeronautical Research Foundation; William L. Anderson, Executive Director, Pennsylvania Aeronautics Commission; George L. Haddaway, Ft. Worth, Editor, Southern Flight; A. S. Koch, Assistant Administrator for Aviation Safety; George L. Burgess, rear, left, Deputy Administrator; H. Lloyd Child, Assistant to the Administrator for Personal Flying Development, and Secretary of the Committee; D. W. Rentzel, Administrator of Civil Aeronautics; Don Flower, Wichita, Kans., Cessna Aircraft Co., Chairman of the Committee; F. B. Lee, Deputy Administrator; Freeman Alberry, Chief, Safety Rules Division, Civil Aeronautics Board (rear); E. S. Hensley, Deputy Assistant Administrator, Office of Aviation Safety; J. B. Hartranft, Jr., General Manager, Aircraft Owners and Pilots' Association; William H. Klenke, Sales Manager, Stinson Aircraft Co.; L. Marsden, Buffalo, fixed base operator; Harold Wood, Birmingham; and Harry Von Berg, Stockton, Calif., fixed operator.

Emphasis on Stalls Urged

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first step in construction of larger and more expensive airports.

Airport Recommendations Made.—Their resolutions read: "In order that airports be more conveniently located, cost the taxpayers less and result in more airports for the same amount of federal money available for Class 1, 2 and 3 airports, it is urged that where single-strip design both improves convenience of the site location and cuts costs to the community that preference be given to such design."

The Committee urged the CAA to bring a test court case on the matter of misleading air markers. After hearing a CAA report that advertisers are putting names of places and products on roof tops in such a manner that they are similar to the standard air marker, the committee questioned whether existing laws regarding navigation signs would cover such dangerous practices.

The Committee commended the CAA for its program of designating industry representatives for repair agencies; endorsed investigations into the value of shoulder harness for private pilots; recommended continuation of the operation of revolving light beacons on the airways; and commended the CAA for development of low-cost receiver equipment for VHF airway radio use.

Sub-Committees Are Appointed.—Sub-committees were appointed to work out a more acceptable definition of the words "for hire" in the Civil Air Regulations; to study the question of exclusive contracts for sale of aviation fuel at airports built with federal money; and to study relations of the states and federal

government in the enforcement of CAR and investigation of air accidents.

The Committee favored a 12-hour forecast of airway weather rather than an 8-hour forecast and suggested location of the local weather bureaus at the airports so that continuous flying weather information might be available. It favored no change in present regulations calling for physical examinations each 2 years for private pilots.

Lynn Bollinger, new member of the Committee from the First Region, reported on his recent survey of the fixed base operator business throughout the country, saying that sudden termination of the GI training contracts would be disastrous to many such operators. The Committee asked the Administrator to consult with the Veterans Administration regarding a gradual tapering off in its contracts when and if termination is considered. Bollinger also declared that improvement of the personal plane is a requisite for any degree of improvement in the growth of the personal flying industry.

New RTCA Papers Available

Two new publications of the Radio Technical Commission for Aeronautics are now available, it has been announced by L. M. Sherer, Executive Secretary of the Commission.

Paper 45-48/DO-15 is entitled "Study of Simplex vs. Crossband Operation as Applied to International Aeronautical Air-Ground Communication." Paper 50-48/DO-16 is entitled "Long Distance Air Navigation Aids in the North Atlantic Area."

The publications are available upon request to Mr. Sherer, Room 597, Department of State Building, Seventeenth Street and Pennsylvania Avenue NW, Washington 25, D. C.

